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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,246	04/30/2001	Yves Louis Gabriel Audebert	741.01101	8917

7590 03/31/2005

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EXAMINER

LANIER, BENJAMIN E

ART UNIT PAPER NUMBER

2132

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/844,246

Applicant(s)

AUDEBERT ET AL.

Examiner

Benjamin E Lanier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,9,10 and 15-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,10 and 15-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/23/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment filed 28 February 2005 amends claims 1-3, 9, 10, 15-20, 29, cancels claims 8, 11-14, and adds claim 42. Applicant's amendment has been fully considered and is entered.

### ***Response to Arguments***

2. Applicant's arguments, filed 28 February 2005, with respect to the rejection(s) of claim(s) 1-41 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Chan, U.S. Patent No. 6,005,942.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7, 9, 10, 15, 20-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Chan, U.S. Patent No. 6,005,942. Referring to claims 1, 4-6, 20-23, 25-36, Chan discloses a method for downloading applications to a smart card after is has been issued wherein a smart card issuer can electronically forward an application to a smart card, that is being interface at a user terminal, over an appropriate network (Col. 10, lines 43-49), which meets the limitation of establishing a remote communications pipe between a PSD and a remote computer system over a network comprising a local client for use as a host to said PSD, wherein said local client

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comprises means for functionally connecting to a PSD Interface and said network, and means for functionally communicating over said network with said remote computer system. The applications that can be forwarded can include any application that can be supported by a smart card and include command interfaces, such as APDU interfaces which facilitate communication with the external environment (Col. 5, lines 22-28), which meets the limitation of client communication means for transmitting and receiving message packets over said network using a packet based communications protocol, and for transmitting and receiving APDUs through said PSD Interface. APDU interface can be used during past issuance installation of an application or during loading card global data. An application load and install option is performed via a set of appropriate APDU commands received by card domain (Col. 5, line 66 – Col. 6, line 3), which meets the limitation of first client data processing means for receiving incoming message packets from said remote computer system using said client communications means, separating encapsulated APDUs from said incoming message packets thus generating desencapsulated APDUs and routing said desencapsulated APDUs to said PSD through said PSD Interface. The smart card executes and responds to commands from the issuer that result in a transition in the card life cycle from one state to the next (Col. 12, lines 46-50), which meets the limitation of second client data processing means for receiving incoming APDUs from said PSD interface, encapsulating said incoming APDUs into outgoing message packets and routing said outgoing message packets to said remote computer system through said client communications means.

Referring to claim 2, Chan discloses that the smart card is being interface at a user terminal (Col. 10, lines 43-49), which meets the limitation of at least one PSD comprising means for functionally connecting to said PSD Interface and means for functionally communicating

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through said Interface. The applications that can be forwarded can include any application that can be supported by a smart card and include command interfaces, such as APDU interfaces which facilitate communication with the external environment (Col. 5, lines 22-28), which meets the limitation of PSD communications means for transmitting and receiving APDU messages through said PSD Interface. The smart card executes and responds to commands from the issuer that result in a transition in the card life cycle from one state to the next (Col. 12, lines 46-50), which meets the limitation of PSD processing means for interpreting said APDU messages, executing commands included in said APDU messages and transmitting responses in APDU format through said PSD Interface using said communications means. The smart card contains a memory that stores a card identification number (Col. 2, lines 1-7), which meets the limitation of memory storage means for storing at least one unique identifier.

Referring to claims 3, 20, Chan discloses a method for downloading applications to a smart card after it has been issued wherein a smart card issuer can electronically forward an application to a smart card, that is being interfaced at a user terminal, over an appropriate network (Col. 10, lines 43-49), which meets the limitation of at least one remote computer system comprising means for functionally connecting to said network and means for functionally communicating with said local client, server communications means for transmitting and receiving messages over said network using said packet based communications protocol. The application server receives requests from the smart cards for applications and authenticates the smart cards. Once authenticated, the application server passes the application data to the issuer where it is transferred to the user terminal that is interfaced with the requesting smart card (Col. 22, lines 17-54), which meets the limitation of first server data processing means for receiving

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requests from at least one applications level program, translating said requests into APDU format and transmitting said APDU formatted requests to a second server data processing means, second server data processing means for encapsulating said APDUs formatted requests received from said first server data processing means into outgoing message packets and transmitting said outgoing message packets over said network to said local client using said server communications means. The applications that can be forwarded can include any application that can be supported by a smart card and include command interfaces, such as APDU interfaces which facilitate communication with the external environment (Col. 5, lines 22-28), which meet the limitation of third server data processing means for receiving incoming messages from said local client using said server communications means and separating encapsulated APDUs from said incoming message packets thus generating desencapsulated APDUs and routing said desencapsulated APDUs to a fourth server data processing means. An application load and install option is performed via a set of appropriate APDU commands received by card domain (Col. 5, line 66 – Col. 6, line 3), which meets the limitation of a fourth server data processing means for receiving and translating said desencapsulated APDUs sent by said third server data processing means into another message format thus generating a translated message and transmitting said translated message to at least one applications level program.

Referring to claims 7, 24, Chan discloses that the applications can be encrypted and subsequently decrypted before installation at the user terminal using a security processor on the smart card (Col. 7, lines 52-62), which meets the limitation of a secure communications channel.

Referring to claims 9, 29, Chan discloses that the applications can be encrypted and subsequently decrypted before installation at the user terminal using a security processor on the

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smart card (Col. 7, lines 52-62), which meets the limitation of PSD communications means for transmitting and receiving encrypted APDU messages through said PSD Interface, first PSD processing means for decrypting incoming encrypted APDU messages using stored cryptographic information, thus generating incoming decrypted APDU messages, second PSD processing means for interpreting said incoming decrypted APDU messages, and executing commands included in said incoming decrypted APDU messages. The security processor also provides means for the smart card to encrypt communications (Col. 8, lines 5-27), which meets the limitation of a third PSD processing means for encrypting outgoing APDU response messages using stored cryptographic information thus generating outgoing encrypted APDU response messages, and transmitting said outgoing encrypted APDU response messages in said APDU format through said PSD Interface using said communications means. The smart card contains a memory that stores a card identification number and cryptographic keys (Col. 2, lines 1-11), which meets the limitation of memory storage means for storing at least one unique identifier and at least one cryptographic key.

Referring to claims 10, 29, Chan discloses a method for downloading applications to a smart card after it has been issued wherein a smart card issuer can electronically forward an application to a smart card, that is being interface at a user terminal, over an appropriate network (Col. 10, lines 43-49), which meets the limitation of server communications means for transmitting and receiving messages over said network using said packet based communications protocol. The applications can be encrypted and subsequently decrypted before installation at the user terminal using a security processor on the smart card (Col. 7, lines 52-62), which meets the limitation of cryptography data processing means, cryptography data processing means

comprises means for encrypting said APDU formatted requests received from said first server data processing means and sending said encrypted APDU formatted requests to said second server data processing means and for decrypting said desencapsulated APDUs received from said third server data processing means and sending said decrypted desencapsulated APDUs to said fourth server data processing means. Once authenticated, the application server passes the application data to the issuer where it is transferred to the user terminal that is interfaced with the requesting smart card (Col. 22, lines 17-54), which meets the limitation of first server data processing means for receiving requests from at least one applications level program, translating said requests into APDU format and transmitting said APDU formatted requests to said cryptographic data processing means, second server data processing means for encapsulating encrypted APDUs formatted requests received from said cryptographic data processing means into outgoing message packets and transmitting said outgoing message packets over said network using said server communications means. The applications that can be forwarded can include any application that can be supported by a smart card and include command interfaces, such as APDU interfaces which facilitate communication with the external environment (Col. 5, lines 22-28), which meet the limitation of third server data processing means for receiving incoming messages packets using said server communications means and separating encapsulated APDUs from said incoming message packets thus generating desencapsulated APDUs and routing said desencapsulated APDUs to said cryptographic data processing means. An application load and install option is performed via a set of appropriate APDU commands received by card domain (Col. 5, line 66 – Col. 6, line 3), which meets the limitation of a fourth server data processing means for receiving and translating decrypted desencapsulated APDUs sent by said cryptography



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processing means into another message format thus generating a translated message and transmitting said translated message to at least one applications level program.

Referring to claims 15, 37, Chan discloses that the network can be an ATM network (Col. 10, lines 21-23), which meets the limitation of a hardwired network.

Referring to claim 42, Chan discloses a method for downloading applications to a smart card after is has been issued wherein a smart card issuer can electronically forward an application to a smart card, that is being interface at a user terminal, over an appropriate network (Col. 10, lines 43-49), which meets the limitation of establishing a remote communications pipe between a PSD and a remote computer system over a network using a local client as a host to said PSD, wherein said local client is in functional connection with a PSD interface, and wherein said local client and said remote computer system are in functional communications using a packet based communications protocol over said network, the local client transmitting and receiving message packets respectively to and from said remote computer system over said network using a packet based communications protocol. The applications that can be forwarded can include any application that can be supported by a smart card and include command interfaces, such as APDU interfaces which facilitate communication with the external environment (Col. 5, lines 22-28), which meets the limitation of the local client receiving incoming message packets from said remote computer system, separating encapsulated APDUs from said incoming message packets thus generating desencapsulated APDUs routing said desencapsulated APDUs to said PSD through said PSD Interface. The smart card executes and responds to commands from the issuer that result in a transition in the card life cycle from one state to the next (Col. 12, lines 46-50), which meets the limitation of local client receiving

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incoming APDUs from said PSD interface, encapsulating said incoming APDUs into outgoing message packets and routing said outgoing message packets to said remote computer systems.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 16, 17, 19, 38, 39, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan, U.S. Patent No. 6,005,942, in view of Davis, U.S. Patent No. 6,105,008. Referring to claims 16, 17, 19, 38, 39, 41, Chan does not disclose the network being a digital cellular network. Davis discloses a smart card loading system of a cellular network (Col. 8, lines 18-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the smart card updating system of Chan in a cellular network in order to update cell phone smart cards.

8. Claims 18, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan, U.S. Patent No. 6,005,942, in view of Brown, U.S. Patent No. 5,455,863. Referring to claims 18, 40,

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Chan does not disclose that the network can be optical. Brown discloses a network authentication system wherein the network is wireline, optical fiber link, satellite, or any other type of communication channel (Col. 8, lines 56-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made for the network of Chan to be optical because Brown discloses that those skilled in the art would understand that different networks can be used without departing from the spirit and scope of the invention (Col. 8, lines 48-55).

***Conclusion***

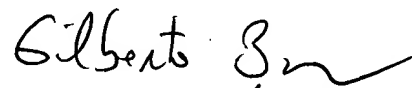
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin E Lanier whose telephone number is 571-272-3805. The examiner can normally be reached on M-Th 7:30am-5:00pm, F 7:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Benjamin E. Lanier



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